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LOCAL OR INHIBITIVE ANESTHESIA

By DR. W. J. HOGAN, D.D.S., Hartford, Conn.

The article below is a most interesting one and will repay you for its reading. The clinician evidently has a minute knowledge of the ramifications of the sensory nerves and uses his knowledge to produce the temporary paralyzation of them at available points in the anatomy, by pressure on them. While the principle is by no means a new one, it is evident from this article that Dr. Fitzgerald has perfected it more thoroughly than it has ever been used before. Elsewhere in this issue is the magazine article to which Dr. Hogan refers.

A method of producing such numbness in different parts of the body that operations may be performed without sensation of pain to the patient has been discovered and developed by careful research, study and experimentation by Dr. Wm. H. Fitzgerald, a nose and throat specialist of Hartford.

The agent he uses to induce such a condition is a simple metal probe tipped with absorbent cotton. This probe is applied with different degrees of pressure to certain areas in either the nose, throat or pharynx, and causes anaesthesia in the afflicted part of the body. Sometimes the cotton is dipped into a dilute solution of trichloroacetic acid.

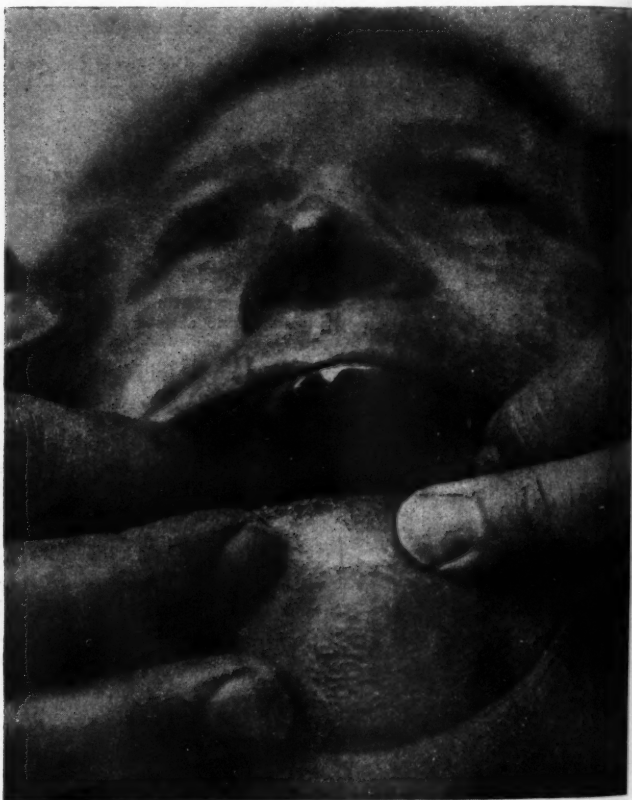
Already Dr. Fitzgerald has given a few clinics. At St.

Francis Hospital before the hospital staff as early as November last, he gave a demonstration of his method with most satisfactory results. The physicians saw the specialist anaesthetize and operate upon several patients within his own specialty, even going so far as to puncture an ear drum, a most delicate and painful operation, and the patients felt no pain. Other operations were performed by the hospital physicians after Dr. Fitzgerald had anaesthetized the patients; and the operations were painless and successful. The doctors were much amazed and they testified that the discovery of this local anaesthesia was marvelous.

On January 18, four dentists, including the writer, wit-

nessed a clinic given by Dr. Fitzgerald. A patient, who had several teeth to be extracted was anaesthetized by him, and when she said she felt no sensation in the jaw Dr. Sears immediately ex-

when the probe was placed upon different points in the nose and throat she traced sensation to different parts of the body. The eye of another was rendered so insensitive that there was no reflex ac-



tracted the teeth without pain to the patient. (Picture one shows the mouth before extraction, and picture two shows model of the mouth after extraction.) Another patient was brought in and

tion when the probe was touched to the eyeball.

Blood was drawn with a sharp instrument from the thumb of another patient without any feeling of pain.

I have watched Dr. Fitz-

gerald about ten or twelve times and can now anaesthetize my own eye by probing a certain area in my nose so that I do not experience any sensation when the eyeball is touched. I also anaesthetized the gum in the region of the lower left cuspid

anaesthetized his eye so that he felt no sensation when pressure was put upon it.

On January 25, we were with Dr. Fitzgerald again, and after watching him for some time I became more enthusiastic and again anaesthetized my own mouth. Dr.



in my mouth so that the doctor punctured the membrane without pain to me.

Wanting to try this upon some one else, I asked Dr. Sears to allow me to anaesthetize his gum which I did by a pressure upon the lip. He felt no pain when I lanced his gum. Becoming bolder, with his permission, I

McLean punctured the mucous membrane in three places as far in as the alveolar process and I felt no pain whatever.

On January 26, at a special meeting of the Hartford Dental Society, Dr. Fitzgerald was present and gave a few demonstrations of his method.

One of the dentists present

complained of a headache, and at Dr. Fitzgerald's request I cured the headache by applying pressure along the gum as far up as could be reached. The same dentist's lip was anaesthetized so that it was punctured painlessly.

With only the aid of Dr. Fitzgerald's method a six-year molar was extracted from a woman's jaw, while she felt no pain. The ear lobe of another woman was so anaesthetized, and a tiny instrument was pushed through it.

There were present at this meeting about thirty-five dentists and two physicians, all of whom were interested and enthusiastic, and Dr. Fitzgerald was warmly

thanked. One very conservative dentist of ripe age, whose name would give great weight to any opinion, said he was glad to have lived to see such a wonderful discovery.

Dr. Edwin Bowers, a well-known magazine writer, spent several days in Hartford watching Dr. Fitzgerald and wrote a lengthy article upon his observations.

The article appeared in the magazine section of the *New York World*, dated December 28, 1913.

Dr. Fitzgerald will give a paper before the Connecticut State Dental Association on April 22, 1914, in Hartford and a clinic the morning following.

TAKING PAIN FROM "PAINLESS"

By EDWIN F. BOWERS, M.D., New York City

Reprinted from the *Associated Sunday Magazine*.

The following story of analgesia was called to my attention by its author. I had not seen it before. I am reprinting it because it is written so interestingly and is so easily readable. It was written for the laity and is of necessity untechnical. The *Associated Sunday Magazine* series is used by hundreds of newspapers, but some of your patients who have not seen this article may pick up this issue and read it, and that will be excuse enough for printing it.

Real scientists have made "Painless Dentistry" of the quacks a reality, by switching off the nerve impulses that tell the brain that the tooth structure is being hurt. By the use of nitrous oxid and oxygen inhalation, dentists are operating on patients sitting wholly conscious in their chairs, yet completely insensible to pain.

The appliance for administering the vapor consists of an elaborate arrangement of metal cylinders, shining gages and valves, rubber bags, and a tube that terminates in a cup to fit over the nose. By adjusting this tube and breathing through the nostrils the mixture is inhaled. Six to eight inhalations bring on a tingling sensation in the ex-

tremities; somewhat similar, only infinitely more mild, than that which follows slight electrical contact. This is the stage of analgesia.

Not all patients, however, can be controlled in the analgesic stage. These are kept under complete anesthesia, sometimes for an hour and a half. Some have been unconscious for five hours at a time. But the absolute safety of the measure can be better realized when we remember that dogs have been kept completely anesthetized with nitrous oxid and fifteen per cent of oxygen for three days successively, without any harmful results.

The percentage of fatality is computed at one in a million. This is the more remarkable, in that N_2O and O has probably been administered in scores of thousands of cases by unskilled operators, while ether and chloroform are usually given by skilled anesthetists. Dr. Laird Nevius has given the gas almost one hundred thousand times without an accident, and Dr. Andrews (the first to use it) has never seen an unfavorable result.

Certain valves liberate the oxygen and nitrous oxid into the "mixing chamber." Here the gases are warmed to body temperature. Their ordinary temperature is about twenty degrees Fahrenheit, or twelve degrees below the freezing point, and in prolonged operations the thermometer sometimes settles to ten degrees. This accounts for the irritat-

ing properties that erroneously used to be charged against the anesthetic itself. From the mixing chamber the compound is discharged into rubber bags connected with the nasal inhaler.

The origin of this analgesia ("analgia," as some call it) is a golden leaf from the brilliant pages of dental progress. The story runs thus:

Since the introduction of anesthetics it was believed and taught that it was improper and dangerous to perform surgical operations before narcosis (complete unconsciousness) had been induced. Even to operate during the stage of light anesthesia was not permitted: nothing short of deep unconsciousness was tolerated.

So when first the tidings winged haltingly over the Atlantic that Sir James Young Simpson, in his clinics at Edinburgh Hospital, was using chloroform to dull the keen pains of childbirth, Dr. Austin C. Hewett of Chicago conceived the idea that the merciful fumes might be equally valuable in dentistry. Procuring a supply of chloroform from London, at a cost almost ruinous to his slender means, he began to experiment on animals with it.

It happened that at this time he was suffering with an abscessed upper incisor tooth. So he took several inhalations of the chloroform vapor, and in that state of drowsiness which he afterward called "obtundure" he forced a lance against that part of the

gum covering the root of the tooth. When he withdrew the instrument he discovered, much to his amazement, that the point had penetrated a quarter of an inch or more, and no particle of discomfort had been experienced. He then took his courage in both hands, carefully adjusted a pair of forceps over the incisor, breathed deep of the sweet pungency, and pulled his own tooth—absolutely without pain!

This was the first surgical operation ever performed under analgesia (if we except the mandragora and poppy of the ancients), and the first operation performed under chloroform in America.

Naturally, Dr. Hewett was enthusiastic; but, like every medical or surgical innovation, dental analgesia met with a skeptical and frigidly discouraging reception. He continued to advocate and employ chloroform in his dental and surgical practice for over fifty years, operating under every possible condition with "surgical analgesia," omitting only four or five of the gravest and most complicated general operations, for which he used the anesthetic stage.

But, except for the support of a few pioneers, the practice met with scant favor. It is only within a few years that analgesia has achieved general recognition. In fact, it is still in the swaddling clothes period, so far as any extensive use is concerned.

Dr. Wolf of Washington,

D. C., relates that sometime after the "Hewett method" had been introduced a tall, raw-boned, awkward man, with a sad face and a kindly eye, came to his office to have a tooth extracted.

Just as the doctor was about to operate, the stranger said, "Wait a moment, please," drew from his pocket a small vial, removed the cork, and inhaled deeply of a volatile substance for a minute. "Now you may proceed," he said, and opened his mouth.

The tooth was removed painlessly. The substance was chloroform; the patient, Abraham Lincoln.

Six years later (1868) Dr. Andrews of Chicago added pure oxygen to " N_2O ," as dentists and surgeons prefer to call the laughing gas, and attempted to perfect a certain, safe method of producing analgesia. The results were fairly satisfactory, considering the crudeness of his invention; but the profession still held coyly aloof from the newfangled device.

Until, thirty years later, Dr. Charles Teter of Cleveland, Ohio, began experimenting with the gases, and devised a contrivance for scientifically administering definite percentage of nitrous oxid and oxygen, thereby enabling the operator to analgesize the patient, or to carry him into deep and prolonged surgical anesthesia, at will. Other experimenters have since designed similar apparatus.

When anesthesia could be maintained with this mixture

for an indefinite time, it attracted the attention of the medical profession, which is now rapidly taking up this method.

At first it was regarded as exclusively a dental anesthetic for minor operations; but in the last few years, after extensive use and experiment by such prominent surgeons and anesthetists as Crile, Kelly, Parker, Teter, Bevan, Gwanthney, and Gatch, attention has been directed to its superiority over ether and chloroform.

As to the comparative merits of nitrous oxid, chloroform, and ether narcosis, the American Medical Association reports that "as a routine anesthetic, nitrous oxid and oxygen has a peculiar value, and in the hands of skilled anesthetists the method is the best yet devised."

Let us now see how analgesia works out in modern practice. We will select a highly sensitive woman, as affording the best means of demonstrating this wonder of science, follow her into her dentist's office, and see and hear what is done.

She is terribly nervous. Her soul is captive to her fears, and these, like skeleton hands, search inward, and thump in muffled drumbeat on her heart. She has to take her nerves by the throat, and force them to let her turn the doorknob. The sharp start, as the door jars lightly behind her, the tremulous movement of the lower lip, the emotional pain, the unrest of the frail

little body, all plead for sympathy.

She seats herself in the chair nearest the entrance, and looks apprehensively at the swinging door leading into the immaculate inner office. And all the while her fingers play over the lock of her handbag, and fumble unceasingly with the handkerchief in her lap.

A trim young assistant, garbed in the obtrusively clean uniform of a trained nurse, bustles cheerfully into the reception room. "Good morning. The doctor will see you in a very few minutes. Won't you lay aside your things?"

Defly the assistant helps her off with her wraps and hat, chatting brightly the while, in an attempt to divert the attention of the thoroughly frightened woman. After a short time a patient comes out, the dentist jotting down his next appointment.

Then, turning briskly, "Come right in, please."

The nurse first leads her to a cozy little retiring room, loosens her clothing, and then seats her comfortably in the white enameled chair. The operator meanwhile busies himself with nail brush and antiseptic soap. His hand toilet completed, he begins a careful examination of the teeth with explorer and mouth mirror. The thoroughly unnerved woman trembles with fear.

The doctor desists. "I am not going to hurt you."

"That's what you told me

before; yet—" and she shook her head hopelessly in recollection.

"I know. I told you then to reassure you. Now I tell you most positively that we shall not cause you one particle of suffering. Since you had your last work done we've made considerable progress in our methods. We are now using nitrous oxid and oxygen to deaden the pain. What I have to do for you in excavating those two cavities might formerly have hurt you considerably; but with this new apparatus," and he patted the cylinders with professional affection, "you'll have it in your own power to be absolutely free from pain."

"Doctor, I couldn't take that. I know it would smother me. Besides, I am terribly afraid you will drill into the pulp. I always understood that sensitiveness is a sort of signal, which tells you when to stop."

"The most sensitive part of the tooth is where the dentin joins the enamel,—far from the pulp chamber. And besides, in drilling, we are guided by our knowledge of the structure and anatomy of the tooth. You must remember that dentistry is now a highly scientific profession.

"Now let's start. We place the inhaler over the nose, so that you get the vapor only as you breathe through the nostrils. Relax, just as though you were very tired, and wanted to go to sleep. Make yourself entirely comfortable.

You will remain awake, and keep your eyes open. You will know everything that is going on; but you will not be hurt. If you feel drowsy, or as if you were going to sleep, inhale air through the mouth; and if there is the least bit of discomfort from the tooth I am excavating, take a few deep breaths through the nostrils again, and it will go away.

"Understand, you are taking the analgesic yourself. It wouldn't do you the slightest harm if you fell asleep; but it is easier for me to work if you remain awake."

The nose piece is adjusted, and the gleaming metal cocks turned on slowly. A low, sibilant sound, as though a mother was hushing a restless child to sleep, a dozen quiet, natural breaths, and the quivering, reaching hands become calm and steady.

Then, under the swift skill of the operator, the teeth, which ordinarily would have been exquisitely sensitive, are prepared for the filling. The inhaler is now removed, and the work proceeds; the patient showing only the natural interest that all grown-up children exhibit in the progress of anything so fascinating as deft workmanship, particularly when we are the material worked upon.

And this is analgesia, soon to be employed universally in the practice of painful dentistry. For there is nothing that adds more to the sum total of human happiness than freedom from the dis-

tress caused by drilling into hypersensitive dentin, jabbing nerve broaches into quivering pulps, and operating, with all the refinements of torture that belong to a darker age, upon the throbbing molars and incisors of squirming, yelling humanity.

It is all so unnecessary, so entirely uncalled for!

Now let us consider an additional reason for using analgesia. We know that in surgery the function of an anesthetic is to inhibit pain; but really its chief and most important action is to prevent "shock." Shock is the grim factor that bludgeons most victims of anesthetics out of existence.

No surgeon would now think of performing painful instrumentation without employing an anesthetic to prevent this. And if surgical shock, why not dental shock?

Operations made by the dentist in his everyday practice are equally as severe as scores of minor measures for which the surgeon employs narcosis. Exhaustion of the nerve centers, rather than the amount of structure involved, is what produces shock; and, beyond certain limits, it is dangerous to submit even the robust to intense pain.

After prolonged dental séances the nerve cells become exhausted. A condition that might be called dental fatigue supervenes,—a state of the system that borders upon collapse or shock. In fact, it may be said to differ from shock only in degree.

And who among us has not experienced, on leaving the chair, that "all-gone, completely used up" feeling? How many possess that Spartan fortitude which enables them to return without dread and anxiety for another siege with those harmless looking little instruments?

And, touching this question, it is interesting to remember that the physics of shock were advocated, and to some extent used, in tooth extraction prior to the introduction of analgesia.

The method commonly employed was for the patient to lie prone upon the floor—a couple of able-bodied individuals on each side of him. At a given signal he was quickly swung to a standing position. The head was raised more rapidly than the blood could follow it, and this produced a temporary anemia of the brain, resulting in a fainting spell. During the few moments in which the victim was unconscious the tooth was dragged forth.

The Japanese employed one of their jiu-jitsu tricks for the same purpose. They produced insensibility by suddenly compressing the artery in the neck (the carotid) between the thumb and finger. This was very dangerous, because if the force happened to be applied too vigorously the patient neglected to wake up.

The "medicine" of modern dentistry is also receiving attention from hygienists, den-

tists, and physicians, and the profound influence of caries (decay) upon the general nutrition and physiological welfare is noted.

They are advocating that caries be prevented by maintaining scrupulous cleanliness,—brushing the teeth carefully, and removing with dental floss any particles left between them, then neutralizing the acid by rinsing the mouth, especially before retiring at night, with an alkali. This protects the calcium salts in the enamel of the teeth from the action of whatever acids may generate in the mouth, regurgitate from the stomach, or be thrown out by the saliva.

If this practice was universally adopted, there would no longer be any necessity for manufacturing approximately eighty million artificial teeth a year, each of which goes to replace one which, with proper care and attention, might have lasted a lifetime.

Dentistry is becoming an exact science. In this connection, it might be observed that Pierre Fauchard, the "Father of Dentistry" (1690-1761), found the dentist a quack, and left him a scientist. With his advent the secret nostrum vender and the old surgeon-barber fell into disrepute, and the profession was placed upon the high plane where it of right belongs, one of the most important of all the varied branches of medicine.

For it cannot be denied that dentistry is equally as impor-

tant to suffering humanity as is orthopedics, dermatology, or any of the other special branches of medicine or surgery.

In fact had not the University of Maryland, in 1837, refused the request of Dr. Chapin A. Harris to incorporate a chair of dental practice in its medical curriculum, dentistry would now be universally recognized as a branch of surgery, and separate colleges for the teaching of these kindred sciences would never have been established.

We have seen that tooth health has a profound bearing upon general health; but it seems almost incredible that to "minister to a mind diseased" may sometimes properly fall within the province of the dentist. Yet such is the case.

Esquirol, the French alienist, first called attention to the fact that the convulsions arising from "cutting" the first teeth predispose to the development of insanity in later life.

Tardy appearance of the teeth, or "impaction," has been known to cause melancholia, mania, and other forms of insanity. In 1876, Savage, the English alienist, reported a case of mania following acute illness. This patient, after three months in the asylum, developed a very severe toothache. The tooth was extracted, and a considerable quantity of pus found at the root. In an incredibly short time the maniac was

lucid, and remained so. Another patient recovered after the evacuation of two abscessed roots. And these are only a few instances among many thousands.

The "regulation" of teeth—correction of dental defects, changing the shape of the jaws, mouth, palate, and face, by that branch of dentistry known as "orthodontia"—is one of the wonders of modern science. And marvelous are its results in increasing mentality, relieving backward, stupid children, and transforming the defective and the semi-idiotic into bright, alert boys and girls. It almost spells perfection.

When the ninety-two per cent balance of our population learn to use a toothbrush, and save their teeth, progress will be still more rapid and remarkable, miracles still wonderful become commonplace.

So we have come up through the heavy-footed centuries of laborious pro-

gress in the dental art to that wonderful era in which the benison of the Blessed Sleep descends upon the sons of men; when the cruel bite of the forceps is translated into a caress, the crushing of the dentin into a beatific vision, and the whirl of the drill, driving its way into the nerve, an ecstatic joke.

And now we are on the threshold of that Golden Age when Pain may be assuaged by a few whiffs of a combination of two gases, one neutralizing, antidoting, and overcoming whatever objectionable features the other may have possessed. The most sensitive structure may now be invaded while the patient is mildly intoxicated with Lethean vapors.

In another decade all fear of the glistening array of polished instruments will have vanished, and men and women will acclaim with pride and gratitude another of our benefactors, the Dentist.

A woman of philanthropic tendencies was paying a visit to a lower East Side school. She was particularly interested in a group of poor pupils and asked permission to question them.

"Children, which is the greatest of all virtues?"

No one answered.

"Now, think a little. What is it I am doing when I give up time and pleasure to come and talk with you for your own good?"

A grimy hand went up in the rear of the room.

"Please, ma'am, youse are buttin' in."—The Delineator.

Skowhegan, Me., recently went Democratic after thirty years of Republican rule, and as his first case the new justice of the peace was trying a young man charged with fast driving. The prosecution had rested, and the attorney for the defense arose. "Your honor, I move that the respondent be discharged." "All those in favor of the motion will say 'aye,'" announced the new justice. A chorus of "ayes" resounded through the courtroom. "Respondent is discharged," said the justice.

SHARK BICUSPIDS AND SUCKER EYE TEETH

By JOHN F. SPEER, Indianapolis, Ind.

Not long ago the Indianapolis Dental Society, in casting about for a good program for one of their monthly meetings, decided to have some one tell the members what to do with their surplus capital, and they secured for that purpose Mr. John F. Speer, the vice-president of one of the local banks. Mr. Speer's talk was so good that I feel sure you will enjoy reading it and I urge you to do so. Of course, being a banker and dealing largely in stocks and bonds, Mr. Speer's mind naturally runs in their direction and he does not dwell on well selected realty as a means of investment at all. But his advice is so good otherwise that it seems unfair to mention this.

The shark is a big mouthed, white bellied, black backed monster with two flippers and a pair of fins. Contrary to general belief the shark is found on dry land, although occasionally it gets into deep water. It is common to no particular climate but is found everywhere. Usually the big mouth is filled with teeth and misrepresentation. Oftentimes it contains unpaid-for gold fillings and a remarkably smooth tongue. Close observation reveals a streak of yellow running down the black back. The white belly of the larger sizes almost always has a protuberance in the shape of a diamond stud located about six inches below the gills. In fact a real-for-sure shark develops a diamond stud just as early in its life as possible.

With its two flippers the shark navigates from place to place in search of food. One or both of its fins are invariably in position at all times to receive this food, or to reach

out and extract it from remote places, painlessly or otherwise. Sharks have a remarkable system of locating feeding grounds. They feed almost exclusively upon suckers and when a shark locates a succulent sucker, or a school of them, that locality is very likely to feel the crunch of several sets of bicuspid within a remarkably short time.

The sucker is wonderfully prolific. In fact it has been asserted that one is born every minute. The species is about equally divided between the male and female. Originally all suckers are bipeds. Their second birth only occurs upon the approach of the harmless looking, but deadly, shark. Against this reincarnation the sucker has many weapons of defense but they are never used. Otherwise there would be no suckers and the world would be denied the study of a most interesting class.

In his search for food the

shark first uses most attractive bait. As the sucker absorbs this bait the shark closes in, and it is only a matter of time until said shark nips a dainty morsel from the sucker's anatomy or swallows him whole.

Suckers usually cut their eye-teeth early in life on some kind of shark bait, but strange to relate this painful operation leaves many of them more anxious than ever to tackle it again.

One sucker has been known to prove fattening food for a half dozen or more sharks before he is finally devoured. The whole trouble with the sucker is his perennial and fond delusion that some time he will pick up a bit of bait that does not conceal a shark bicuspid and live happily ever after.

No man lives who does not feel that he owes it to himself to make the money work for him that he has worked hard to acquire. It is an entirely excusable ambition to want that accumulation to increase as rapidly as possible, in addition to earnings on income.

If all men hoarded their wealth, and were satisfied with the income from their hoarding, commerce would come to a standstill and eventually cease. No great accomplishment in the commercial world has been without its element of risk to the money invested, and no line of business exists that does not carry its chances of loss along with its hopes of profit in dividends.

One might become deeply entangled in economics and finance in this discussion, but the vital question we have to deal with here is, "How shall the professional man invest his savings with safety and profit?"

It may or may not be known to you that there are a number of legitimate business concerns in the country who, for a consideration, will furnish you with a list of names and addresses of certain classes of people, in certain sections of the country.

Experience has taught the promoter of the doubtful investment scheme, or the positive swindle, just what class of people with money are most apt to be influenced by glowing prospectuses and clever letters. A list of these he buys from the mailing list concerns. In addition to this there is a well organized traffic in the names of those who at one time or another have invested in some doubtful enterprise. For instance, the Texas man swaps his list of victims to the silver mine promoter, and the company that floated half a million dollars worth of Canadian timber lands passes its list on to the fellow who is just about to launch an irrigation project. It is even said that good "sucker" lists can be bought from some of the mailing list concerns, the prices of these lists varying with the relative gullibility of the persons whose names are furnished.

Here is a very timely editorial from a well known farm journal that illustrates the point:

"I just got a printed letter that made me itch all over to get rich quick and easy. It made me feel like a worm grovelling in the dust, for it holds out such high prospects of peace and plenty. Here's the refrain word for word: 'Can you make better than 133 per cent. annually on your money? Can you make half this much and still have your original investment absolutely safe? If you can turn your dollars to better account, then you are not interested in our free booklet that tells you how.

"'If you haven't been making that much money, and want to invest a few dollars a month that will return a profit this great, then use the attached return post card at once which will obligate you to nothing, affix a one-cent stamp and get it in the mail *to-day.*'

"That almost got me. I unconsciously reached for the stamp so as to hurry the fortune my way.

"But on turning a page I read some more.

"'Do you want an income for life?

"'Do you want to be independent and comfortable during your declining years?

"'Do you want to know that your loved ones will be provided for when you are gone?

"'Do you want to safeguard your own and your family's future with an in-

vestment as solid as the everlasting hills?

"'Do you want to have the kind of insurance that does not require you to die to win?

"'Do you want an estate as safe as government bonds, and paying a rate of interest amounting to 133 per cent. per annum?"

"That line of talk got me all excited. Of course I wanted an income for life. Of course I wanted to be independent and comfortable in my declining years. And to safeguard my family. I've taken out many an insurance policy—and these cost me something. Here's a scheme to do that at a big profit. I found my hand slipping around my check book when a quotation from 'Letters from a Self-Made Merchant to His Son' came to me, which reads like this.

"'You must learn not to overwork a dollar any more than you would a horse. Three per cent. is a small load for it to draw; six, a safe one; when it pulls in ten for you it's likely working out West and you've got to watch and see that it doesn't buck; when it makes twenty for you you own a blamed good critter or a mighty foolish one, and you want to make dead sure which; but if it draws a hundred it's playing the races or something just as hard for horses and dollars, and the first thing you know you won't have even a carcass to haul to the glue factory.'

"That was a dash of cold

water in my face. It brought me to my senses, and I tore the enticing appeal into shreds so nobody else could get hooked, and—

"Well, I leave it to you. Did I lose a fortune by not grasping that fleeting opportunity to get 133 per cent?

"I've seen the 'everlasting hills' washed into gullies and I've seen investments supposed to be as 'solid as the everlasting hills' go a-glimmering.

"Take my word for it—anybody with a cinch on 133 per cent. isn't looking for somebody to help rake in the coin."

Going just a little further into this phase of the question it is a well known fact that professional men are considered among the most profitable of prospects for the schemes of the sharks. I say this from knowledge of their methods and without any reflection whatever on my audience. Physicians and dentists have long been the shining mark for the mining shark and his brethren in the oil well and rubber plantation business.

The reason is not far to seek. The professional man is ethical by training. The lexicon of the shark knows no ethics save that one sublime, self-given commandment—"Get the money."

The professional man as a rule has paid little or no attention to business, or rather to rules that are followed by the conservative and successful investor. His mind has been trained to his work—

not to finance or the analyzing of investment propositions. He is a ready listener to the plausible story that promises splendid returns, and perhaps the doubling, in short time, of the money he has accumulated by the sweat of his brow. His daily work brings him no opportunities for investment. He envies the man who picks up "snaps" and makes "quick turns."

When he sees among the subscribers to a certain stock issue the names of one or two men whose business judgment he knows to be good, he is naturally impressed. He goes into it on the strength of those names and without making any investigation for himself. Therein lies one of the shrewdest tricks in the shark's whole repertoire. He manages early in the game, either by virtue of his smooth tongue or perhaps by presenting a well known man with a block of the stock, to secure the use of his name. Oftentimes the use of the good man's name is secured upon the guarantee to buy the stock back, say in ninety days, after the suckers have all been landed. It is with this bait that more credulous suckers are caught than by any other.

Here's how one victim expresses himself:

"Up stairs in a box I've got wonderful stocks that I've bought at odd times through the mail. I've got Mexican rubber and Antarctic blubber, preferred ambergris—that's a whale. I've got oil stock in wells that the prospectus tells

are gushing great guns at each event; and all that they need is more suckers to bleed to pay seven hundred per cent. I've got Pineapple stock that's as firm as the rock of Gibraltar, whatever that be; it's good as the cash and secured by the ash of some volcanic isles in the sea. I've got gold that will run fifty pounds to the ton, and copper that's almost pure stuff; and it's all sure to pay big returns some fine day when the suckers buy holdings enough. I've got Plain and Preferred, I've got Scrambled and Shirred, got Sugar and Coffee and Trash, that brings me a line of prospectuses fine, and everything else except cash. I've got old Spanish Grants to West Indian Lands that were deeded one time to Cap. Kidd, and some stock that he bought in this old swampy spot is as good as the day that he did. I've got stocks of all hues—reds, greens, purples and blues, guaranteed nine per cent and some ten; and just when I swear I'll not buy a new share, then I get 'promoted' again. I haven't been missed by one Investors' list, by every new swindle I'm booked; now here's a new line, come in—water's fine. I feel myself biting—I'm hooked."

But the doubtful investment is by no means confined to outside promoters who send their representatives into the home field. The promoter of some company, or some wealth-promising scheme, may be one of your own friends,

or a man or men you have known for life. Many of these companies or schemes work out eventually and prove profitable. Others fail miserably either before or after they have gotten into operation.

The one question the man with limited means should ask himself on every doubtful investment proposition, if he ask no other, is, "Can I afford to lose if this falls through?"

The next most important question is: "Am I quite sure that I will not need this money before this investment makes good?"

No man wants to lose money. Some men are better able to lose it than others. No man *believes* he is going to lose when he goes into an investment. The whole success of the promotion of fake investments and questionable projects lies in these prime factors: First, the ability of a clever salesman to tell a plausible story that does not have a flaw that the average man or woman can see. Second, the unwillingness of a prospective investor to take an *experienced* investor into his confidence and ask his advice before signing a contract or subscription. In most cases the salesman has so thoroughly convinced his prospect that he feels that it would simply be a waste of time to ask anybody what they thought of it.

One of the most common forms of investment that frequently causes trouble for the man of limited means is stock in a company just organizing

—insurance, securities, manufacturing, merchandising—I make no special classification and no exceptions.

In almost every case the stock is sold by solicitation. That solicitation makes the only existing market for the stock. A new corporation has to have time to build up its business. One, two, three, often five or six years have been necessary to put it on a dividend paying basis. You have bought stock. Before the company has made good you need your money and need it badly. You didn't know that you would ever need it when you invested. But the pinch has come. You try to sell your shares. You are surprised to learn that the stock has no value because there is no market for it. *Promotion has made the market*, and there is no clever salesman to get out and sell *your* block. Some day that stock may be selling at a splendid premium. Your problem, if you are a man with limited accumulation, is simply this: if you invest in securities of this character are you sure you can wait until the project makes good, if it ever does?

I may be criticised for the assertion, but I make it with the courage of a conviction: the man or woman with a limited amount of money to invest, or with the savings from earnings to be put to work, should invest solely for income and in those investments that are farthest removed from the chance of loss, and that may be readily

converted into cash if necessary. Such an individual has no business whatever taking the chances that go with even legitimate speculative enterprises, much less listening to the siren song of the smooth tongued promoter of get-rich-quick schemes.

Here's an extract from that justly famous philosophy of old Gordon Graham: "It's better to go slow and lose a good bargain than to go fast and never get a bargain. It's all right to take a long chance now and then, when you've got a long bank account, but it's been my experience that most of the long chances are taken by the fellows with short bank accounts.

"A man's fortune should grow like a tree, in rings around the parent trunk. It'll be slow work at first, but every ring will be a little wider and a little thicker than the last one, and by and by you'll be big enough and strong enough to shed a few acorns within reaching distance, and so start a nice little nursery of your own from which you can saw wood some day."

Practically all investments, good and bad, come under the general heads of real estate ownership, real estate mortgages, business ownership, stocks and bonds.

Farm lands have been profitable investments for the man who has time to look after them. The man who owns his own city home is usually envied, but the man who owns his own home knows that he is indulging in

a luxury that he either can or cannot afford. If he has built or bought wisely he always has an investment that will return his money to him, and often with a profit. Rental property is a much discussed proposition. Here and there you will find rentals of a certain class that are profitable investments. Many of them are netting a bare 2 or 3 per cent. or are being kept up at an actual loss. Taxes, insurance and repairs are serious detractors from rental income.

Business ownership or partnership is hardly within the scope of this talk. Real estate mortgage loans were at one time the most popular forms of investment. In fact, there were many people who believed in only two forms of investment, government bonds and real estate mortgages. A few of them are still in existence. A clear title, a legally executed mortgage and a good moral risk, is unquestionably good security for a loan. The average farm or city real estate mortgage pays from 5 to 7 per cent. With 2 to 3 per cent. taxes to be paid on investments of this class, the income is of course cut to a much lower rate.

Stocks are perhaps the greatest mixture of good and bad in the whole investment field. Their purchase is scarcely the wise thing for a novice to attempt. The stock in a new enterprise is always a risk. There are well seasoned dividend paying stocks in well established companies

that are good conservative investments.

It should always be borne in mind that a share of stock is a share in the business, and it wins or loses in proportion as the business proves successful or otherwise. A bond is a receipt for money loaned to a business or municipality. The interest must be paid on bonds, ahead of any disbursement or dividends on stocks. Bonds must be paid at maturity.

There are high grade business and professional men who own their own business, as well as men who work for a salary, who have never seen a bond. They have been putting their money all back in the business to make more money and who, to use their own words, "have just never thought of bonds as a sinking fund against possible business depression or unforeseen hazards." There are professional men with splendid practices who have invested or speculated a little here and a little there, perhaps with resulting losses that have crippled them for years. They have never considered that high grade bonds and certain stocks are established, and pay interest or dividends from the day they are bought. Their value is always there in case the pinch comes and money is needed. The placing of money where it is safe and profitable from the start is so easy, if a man is satisfied with a fair rate of income, that I wonder why so many men who can not afford it will take the chances

they do, of losing all for the sake of promised high income.

Here is a logical proposition: you have \$100 or \$50,000 you want to invest. You have no idea of the legal requirements that surround certain investment issues, you know nothing of the values back of the securities you contemplate, or the future convertibility of various investments.

There is no reason why you should, any more than I should know how to fill or crown my own teeth. The honest, experienced banker or investment broker makes a business of buying investment securities. He is in business not for one sale of stock or bonds, not for the promotion of a certain issue, but as a life-long profession.

His whole business success hinges upon his ability to advise and assist investors wisely. Is it not therefore logical that he will be careful and conscientious in his recommendations, if for no other earthly reason than because it is good business for him to be that way?

The trouble with most men who listen to investment schemes is their disinclination to consult some one who makes it their business to know. They sign a contract or a subscription blank first and make their inquiries afterward.

A contributor to the *New York Mail* writes, "Last year I bought a bond. If you have never indulged in this pastime you have missed much joy.

On October first I sat with the bond in one hand and the scissors in the other, and as the hour of midnight came I clipped off \$30 with one well directed snip. Never have I earned money so easily. I can hardly wait until March to take another hack at it. My ambition is to get a game wrist from over-indulgence in this sport."

On the other hand, one writer sings of the folly in too much accumulation in investments. Our old friend, Walt Mason, voices it thusly: "To gather chink, to eat and drink, still grasping, seldom giving; to get more rocks and bonds and stocks—we call this process living! And when we brag about the flag, and warble 'Yankee Doodle,' and when we talk of Plymouth Rock, our thoughts are still of boodle. We twang our lyres and sing our sires, this mighty nation's builders, but as we raise our song of praise, our thoughts are all of gilders. We think him great, who has a crate of bullion in his attic; with bow and beck we bend the neck to all things plutocratic. To nail the dust we strive and bust our galuses and collars; to swell a roll we'd soak a soul: our one delight is dollars. And we miss a lot of bliss, and life is far from funny; we dream of plunks when in our bunks, and waking rave of money. We talk of art, but in our heart it has no place abiding; the money wight, by day and night, upon our backs is riding. Man talks of books and, talking looks around, as in a

pickle; he fears he'll fail, perhaps to nail another dime or nickel. To yearn and dream, to plan and scheme for dollars in the distance; to get more rocks, more bonds and stocks, we call this thing existence."

But even as we admit that friend Mason's rhyme is a clever symposium upon the spirit of the times, yet we must not overlook that great portion of our population which *lives* as it trudges through this vale of tears—

MY CONSCIENCE.

JAMES WHITCOMB RILEY
in the Century.

Sometimes my Conscience
says, says he,
"Don't you know me?"
And I, says I, skeered
through and through,
"Of course I do.
You air a nice chap ever'
way,
I'm here to say!
You make me cry—you make
me pray,
And all them good things
thataway—
That is, at *night*. Where do
you stay
Durin' the day?"

And then my Conscience says
onc't more,
"You know me—shore?"
"Oh, yes," says I, a-trimblin'
faint,
"You 're jes' a saint!
Your ways is all so holy-
right,
I love you better ever' night
You come around,—'tel plum
daylight,
When you air out o' sight!"

those wise souls who get out
of life the worth while and
the beautiful, all the while
laying aside a little of this
world's goods, in order to
continue to get the worth
while and the beautiful out
of life, in the sunset days
when weary feet and tired
brains are ready to quit the
turmoil and strife and snug-
gle back into that softest of
all earthly couches—a safe
deposit box with a four inch
mattress of stocks and bonds.

And then my Conscience sort
o' grits
His teeth, and spits
On his two hands and grabs,
of course,
Some old remorse.
And beats me with the big
butt-end
O' *that* thing—'tel my closest
friend
'Ud hardly know me. "Now,"
says he,
"Be keerful as you 'd orto be
And *allus* think o' me!"

ONE day, according to Mr. Moulan, a self-important individual was burying his ball in every bunker, corn field, wood lot, gulley and stream on, near or adjoining the links.

"This is the most difficult course I've ever played on," commented the unfortunate one.

"How do you know?" said the caddie. "You haven't been playing on it yet."—*Exchange*.

EDITORIAL



GEORGE EDWIN HUNT M.D., D.D.S. EDITOR
11 W. NORTH STREET. INDIANAPOLIS, IND., U. S. A.

ORAL HYGIENE does not publish Society Announcements, Obituaries, Personals, nor Book Reviews. This policy is made necessary by the limited size and wide circulation of the magazine :: :: ::

ABOUT INVESTMENTS

Elsewhere in this issue is an excellent article on investments by Mr. John F. Speer. In it Mr. Speer advises the buying of stocks or bonds through some established and responsible banking or bond house, and his advice is most excellent. In reading his paper in manuscript, I was reminded of an excellent plan for the average dentist to pursue if he wishes to save up a nest egg of bonds. I cannot recall where I read it and I have never used it, but it will certainly work.

The reason most of us never save any money is because we get our incomes in comparatively small amounts and we spend it before it accumulates sufficiently for us to invest, say, a thousand dollars at a whack. We are always going to save, but saving twenty or fifty dollars seems so piffling, and before we know it, it is gone and gone forever. Ain't that the truth?

Now, bonds can be bought in many different amounts, but the usual denominations are five hundred or one thousand dollars. Most dentists will pay their obligations when they become due, even if they will not permit their money to accumulate. Therefore, and this is the plan, why not buy a bond with very little money and gradually pay it off? Do you see? No? Well, for illustration, suppose you have one hundred dollars and past experience teaches you that that one hundred is powerful apt to get away from you pretty quickly. And suppose you go to your banker and negotiate with him for a one thousand dollar bond which pays, say, four and a half per cent. interest. And suppose you tell your banker you want to pay one hundred dollars cash—and the accumulated interest, which will not be much—and borrow nine hundred dollars from him for thirty days, to make up the remainder of the purchase money, and suppose—but, pshaw! What's the use of supposing. Let's get it in figures. Your banker will want six per cent. interest, so your scheme would work like this. I assume you can save one hundred dollars per

month and interest. If it is only fifty, that simply delays the time you really own your bond and does not mitigate against the plan at all. You make a new loan at your bank each month, using the bond for security.

1st month, 6 per cent. on \$900 borrowed is	\$4.50
2nd month, 6 per cent. on 800 borrowed is	4.00
3rd month, 6 per cent. on 700 borrowed is	3.50
4th month, 6 per cent. on 600 borrowed is	3.00

And so it goes until the tenth month you own your bond and owe no money at the bank. You have paid your banker in interest the gross sum of \$22.50. But in the meantime your bond has earned interest for you to the amount of \$37.50 in that ten months, and after the second monthly payment is actually earning more money in interest than you are paying your bank.

Now is that not a perfectly feasible plan? Any banker will lend you \$900 on a \$1,000 bond you buy of him. If he refuses I would not buy the bond, for something must be wrong with it.

By the above plan, any of you able to withdraw \$100 per month from your business can own a \$1,000 bond, free of encumbrance, in ten months time. If you can only spare \$50 per month, buy a \$500 bond or else take twice the time to pay off a \$1,000 one.

Now, if you die poor, don't blame me. It is your own fault, for I have shown you how to save.

A WOMAN'S COLUMN SUGGESTED

Some months ago the editor received a letter from the wife of a friend in Ohio, part of which is here quoted:

"How about some of the Mrs. Dentists writing and telling you how much they enjoy the little but mighty ORAL HYGIENE. The only thing lacking in it is a department for the wives of dentists, telling us what to do when baby cuts a tooth, and how to evolve Chippendale furniture from barrel hoops and soap boxes, and similar interesting information. I am not intimating that *all* dentists' wives have to create something out of nothing, but there are a few who have had the desire to do so. I married my dentist husband while he was still in the fledgling state in the college under your guidance, and if it is any recommendation to his *alma mater*, I am able to turn office curtains upside down and make them look like new, or can fashion a hobble-skirt from a flour sack.

"This ought to make the hearts of your unmarried undergraduates, who want to take better halves, go pit-a-pat. One thing is sure. The new wife of a recently graduated dentist has no time to be a suffragette nor has she time for inclinations toward affinities and similar luxuries."

Of course, when so charming a woman as the wife of Brother Otis suggests a thing, anyone is bound to think favorably of it, but somehow or other the plan did not make

progress. I could not determine what to call it, for one thing. If I named it "Mother's Mixture" or "Mother's Mess" or "Mother's Mistakes," all the childless wives might get mad, and I did not think highly of "Wifely Worries," or "Hash for Helpmates," or "Wisdom for Wives," or even "Pertinent Paragraphs for Legal Soulmates." I asked The-Woman-Who-Motors-With-Me about it and she said she thought if I was going to edit it "Peevish Piffle" or "Soulful Slush" might do, but I explained the department would be made up entirely of contributions. So somehow or other the blame thing would not start, until the other day I received another letter from the wife of another dental friend in Cambridge, Mass., and now the "Department for Wives" is on its way. All you girls are urged—that ought to be "cordially urged" to comply with the society column requirements, I believe—are cordially urged to contribute. Now is the time and this is the place. My breath is bated and I am awaiting results.

In the meantime, here is the first contribution to the Department, from Cambridge, Mass.:

EDITOR ORAL HYGIENE:

The other evening I picked up a copy of your book and was much interested in the article on Thumb-Sucking Children. I would like to add my own experience.

When my first baby became addicted to the bad habit, I found out that there is a patented device for its cure, which, for ready adaptability and from a hygienic standpoint, I think surpasses any of the devices given.

It is called "Hand-I-Hold," and is sold at the leading drug stores in Boston and in other large cities, I suppose. It consists of a pair of perforated aluminum (I think celluloid also) balls, with openings large enough to admit a child's hand easily. Around the edge of the openings are small perforations to which must be sewed the white cloth wrist-bands which are a part of the device. To these bands are attached tapes to fasten to the forearm and a small safety pin secures it more firmly. One "mit" may be used at first until the necessity of using both at the same time is caused by the child's transferring the habit to the other hand. Not only in thumb-sucking but in other cases would this device be practical. As a cure for thumb-sucking I am glad to recommend it.

DENTIST'S WIFE.

P. S.—Would like to add that I have never seen "Hand-I-Hold" advertised. Friends who have used it (among them physicians as well as dentists) learned of it through my recommendation. Why doesn't your enterprising little book make it better known by advertising it to the community at large?

Our correspondent's final suggestion is respectfully referred to the advertising department with a suggestion to hustle.

THE GARY PUBLIC SCHOOLS

The Gary, Indiana, public schools are models in many respects and are to be commended for the advanced stand they have taken in many modern educational methods and in none more so than in their work in hygiene. Volume I, num-

ber 2, of the *Hygiene Bulletin*, published by the hygiene department of the Gary schools, is an eight page pamphlet full of good things for the school children.

That good sanitation, which is just about as desirable a designation as good Samaritan, Dr. Otis B. Nesbit, president of the Valparaiso, Indiana, health board and earnest advocate of mouth hygiene, has been to Gary and given the school children a talk. With his other good advice he put in his usual plug for clean mouths and clean teeth.

In the Gary schools the child can get a good, wholesome lunch at a small cost. Tomato soup costs four cents, roast beef ten cents, mashed potatoes or potato salad five cents, and French peas, tapioca pudding, stewed prunes, cake, cocoa or apples may be had for three cents.

New York city also serves a luncheon at many of its school houses where the prices on the menu are much less than in Gary, and another good feature of the New York city luncheon is that the pupil must buy and eat a bowl of warming, nourishing broth or soup at an expense of one penny before he or she is permitted to purchase any sweets or sours—cake, pastry, pickles or jam. That is a sensible idea, as otherwise the children are apt to spend their luncheon money on food unfitted for them.

But, hurrah, for the Gary schools and the *Hygiene Bulletin*! I am for them.

UNIQUE BUT EFFECTIVE

This story was sent in by some one or other and it is good enough to print. I always laugh at this story every time I see it in print.

Shugio, an ambitious young Japanese, employed by a dental supply house on the Pacific coast, had asked so often for a chance to do clerical work in the office, that last week he was told he might write letters to three persons on the firm's books to ask them if they would make some payment on their accounts.

"Go easy with them," cautioned the head of the house, "they're all good customers but just a bit slow."

Two days later the management was surprised to receive checks in full for all three accounts. One check from a well known and prominent dentist in the state, as well as one of the firm's most valued customers, was accompanied by a sharp note, and the head of the house hastened to find a copy of Shugio's dunning letter.

It reads: "Dear Doc: If you don't do us the extreme honor of paying all the dollars and all the cents of this account, which so long you have owed to our business of dental merchants, we shall to our regret begin to do something that will cause you the utmost astonishment."

LISTERINE

Listerine is a fragrant non-toxic antiseptic, composed of volatile and non-volatile constituents, agreeable to the taste, refreshing in its application and lasting in its antiseptic effects.

Listerine is a saturated solution of the mild mineral antiseptic, boric acid, plus ozoniferous oils and essences. The acid reaction of Listerine has no effect whatever upon the tooth structure, whilst its alterative properties not only add to the protective quality of the saliva, but are antagonistic to the bacteria of the mouth.

Listerine is truly prophylactic, in that it exercises an inhibitory action upon the acid-forming bacteria of the mouth, and assists in maintaining through natural means, the alkaline condition so necessary for the welfare of the teeth.

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Send for a specimen copy of "The Dentist's Patient," an interesting treatise on mouth hygiene, furnished free of expense to dental practitioners for distribution to patients.

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also Finished Dentures
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THOUGHTS FOR THE MONTH

By JOHN PHILLIP ERWIN, D.D.S., Perkasie, Pa.

A FOOL THERE IS

A Shower of Saliva Facts for the Month of April

The sunny Italian with his macaroni, the fighting Mc with his potato, the ambitious Jap with his rice, the old colored mammy with her hominy and the restless American with them all, silently but surely, according to scientists, are running factories in their mouths wherein the human saliva manufactures more sugar than all the trusts and refineries combined.

Common belief has long held digestion to be a monologue stunt of the stomach, while in fact it is a one reel performance of the entire 28 feet of alimentary canal, extending from the mouth to the extremity, with the saliva appearing in every picture.

If stomach sufferers traveled the alimentary canal in a northerly direction and studied the amusing pranks of saliva their eyes would be opened to the fact that while the stomach may be the seat of frequent health rebellions, many of the seditious plots are hatched in the saliva of the mouth. Were the human family to learn of the large amount of *dis-ease* resulting from abused saliva a wholesale reformation of mouth habits would ensue.

The saliva is too busy a worker to suffer any interruption good-naturedly. It prepares all our food for a happy entrance into the

stomach, washes the mouth several times every minute, supplies as often a drink to the stomach and intestines that they might best work and best agree, assists in the sense of hearing, smelling and tasting, governs like an autocrat the act of talking, cleans the teeth and all in all makes itself a general handy man about the body.

Once upon a time saliva wore a crown of despoise. An ancient father to punish a disobedient child spit in its face and debarred it from his presence for a period of seven days.

An unmarried man persistent in his refusal to accept as a wife the widow of his deceased brother suffered the extreme penalty of having her remove his shoe to signify a robbing of his power—a man could travel neither far nor fast with one bare foot—and then spit in his face or on the ground before him.

Shylock, long calloused by the rain of insults from his enemies, writhed beneath the cruel thrust of Antonio when he spit upon his ancient gabardine.

Previous to the days of Sherlocks and dictagraphs, East Indian prosecuting officials, knowing some of the habits of saliva, frequently employed it in a crucial test of criminals to balance their

Dr. Lyon's forceful publicity--of which this is an example --is continually in progress through the great national publications for men and women. Millions of people from coast to coast are always reading and heeding the hygienic message advocated by Dr. Lyon's Perfect Tooth Power.

Prepared for nearly half a century

by a Doctor of Dental Surgery. Each Dr. Lyon's advertisement invariably contains these phrases: "*Visit Your Dentist at Least Twice a Year*"--"*What Dr. Lyon's Does Not Do, Only Your Dentist is Competent to Do.*"

Professional endorsement of our dentifrice and of our educative methods of publicity has been spontaneous and generous. Our files contain thousands of letters from dental practitioners who have tested Dr. Lyon's thoroughly and who have placed themselves on record as to its qualities.

**Have You Had
The Dr. Lyon's
Famous One
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**Dr. Lyon's
PERFECT**

Tooth Powder



Prepared for nearly half a century by a Doctor of Dental Surgery

A pure, velvety powder—delightful in its effect—so soft to use because it cleanses and preserves the teeth by thorough polishing. Prevents the formation of tartar and the beginning of decay. Restores and benefits the gums.

Dr. Lyon's has been popular with the Navy since Admiral Farragut was active in the Service—it's the standard dentifrice of the Army. There is no walk of life in which Dr. Lyon's for three generations has not performed the great and needed work of safeguarding the teeth.

What Dr. Lyon's does not do only your dentist is competent to do

SOLD EVERYWHERE

One of Dr. Lyon's Recent Advertisements

scales of justice. Suspects were given rice to chew and spit out. The one producing the driest rice was adjudged guilty. As the odor of savory cooking causes saliva to flow, so fear checks it.

THE WATER SUPPLY OF THE MOUTH — The saliva supply of the mouth, in plan of construction and in method of operation, corresponds closely to the water supply of a modern home. Every time you swallow, an act regular as the heart beat and generally as involuntary, the saliva spigots are opened, sufficient fluid flows through the pipes from the reservoirs into the mouth until a suitable drink is formed, after which it unconsciously glides down and along the little red lane to bless all about, like showers upon the thirsty earth beneath.

Three pairs of salivary glands constitute the main source of supply. Their names are, parotid, (*para*, "near," and *ois*, "the ear,") sub-maxillary, (*sub*, "under," and *maxilla*, "the jaw,") and sublingual, (*sub*, "under," and *linguae*, "the tongue"). From these glands run small pipes called ducts, (*ducto*, "to lead,") which convey saliva to various points of the mouth.

Situated before and beneath the ear, snugly nestling in and among a complex net work of muscles, nerves and arteries we find the *parotid* gland, the largest of the three pair. With its small gland

bulbs it resembles in form a bunch of grapes, the stem representing the pipe called, Steno's Duct. This whip-cord-like duct is one-eighth of an inch in diameter and two and one-half inches in length. The parotid gland empties into the mouth opposite the second molar. Mumps is an inflammation or abscess of this gland.

The *submaxillary* gland, next in size, is situated deep beneath the tongue under the lower jaw-bone. It has a single duct, the duct of Wharton, which opens at the sides of the fraenum of the tongue. It is quite common when yawning unusually hard to have a stream of saliva spurt out of the mouth from beneath the tongue. This is caused by a pressure of muscles upon the gland.

The *sublingual* gland located beneath the tongue is about one-half the size of the submaxillary gland. It opens by numerous small ducts on the floor of the mouth and by a main duct, the duct of Bartholine. These glands are similar in structure, produce the same quality of saliva and work in sympathy one with the other. In neglected mouths the saliva deposits tartar upon various teeth which proves a destructive force to the teeth it attacks. The amount of saliva produced varies according to the individual.

FOE, FRIEND, FOOL—There be they who treat saliva as they do their character. Some consider it utterly worthless

Why Did Items of Interest secure such a big sub- scription list for 1914 ?

Why is it that the dental colleges base their examination papers on some of the articles it contains ?

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and spit it broadcast without a care for whom it might contaminate. Others guard it as their honor, keeping it ever pure and clean. Many neither know they possess such a treasure nor care to learn of its health giving properties.

In the first class we meet a common foe, a menace to society, the habitual spitter. In railway coaches, about public places and along the highway we are continually affronted by this individual. It is a fact, undisputed, that saliva is a veritable playground wherein we may find every variety of disease germ. To circumscribe the influence of so powerful a disease-distributing force and the careless spitter we employ the sputum cup for the tubercular, the cuspidor for the user of tobacco and for the general public, usually careless, health laws and prohibitive signs.

The next class comprises the true friends of society, those willing at all times to perform the little acts of courtesy that please and unwilling to do anything which might offend.

Caruso, the tenor, before singing in public, with the assistance of two trained valets, cleans, scrubs and polishes his teeth with water and powder; gargles his throat with a salt solution, atomizes his nose with bicarbonate of soda and glycerine, again gargles with cold sterilized water, swabs his throat with menthol and vaseline and completes a half-

hour-mouth-toilet with fresh cold water.

"You have no idea how much dirt can collect in the mouth and nose in one day's time," he once said.

To the last class belongs the fool. He who wastes his good health, that which once spent can never be regained, is truly devoid of reason. Could there be an act more contrary to good sense than the continual polluting of the sensitive saliva springs of the body?

It is absurd to ignore the great injury inflicted upon the salivary glands by the use of strong drinks, drugs, highly-seasoned food and pungent tobacco smoke. And as equally ridiculous to believe the gum chewing habit harmless. We are rapidly learning of other fools beside those who make prayers to vampires or kick a hat concealing a hiding brick.

THE day before her school examination, little Maggie's mother had told her how to answer some questions which she thought the teacher might ask. "Now," said the mother, "if the teacher asks you your age, say you are eight years old; and if she asks you who made you, say God." "How old are you, Maggie?" said the teacher. "I'm eight years old, going on nine," "Who made you, Maggie?" "Oh, mamma told me yesterday who made me, but I've forgotten his name now."—*Exchange.*

What are the essentials of a good dentifrice?

An able authority, Dr. Hermann Prinz, of St. Louis, answers the question in this wise:

"1. It must be absolutely indifferent in regard to the mucous membrane of the mouth—*i. e.*, it must be non-caustic; as regards the teeth, it must be non-decalcifying; as regards the organism as a whole, it must be non-poisonous.

"2. It must have sufficient antiseptic action.

"3. It must have a pleasant taste and odor."

EUTHYMOL TOOTH PASTE

has these requisites in full measure. It contains no substance that is injurious to mouth, teeth, gums or dental fillings. It has the antiseptic property of Euthymol. It is a capital cleanser. It is unsurpassed in taste and odor.

EUTHYMOL TOOTH PASTE is a preparation that you can conscientiously put into the hands of your patients; that you can recommend as having every essential of a good dentifrice.

Ask us for samples.

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THE PRACTICAL ASPECT OF THE ORAL HYGIENE MOVEMENT

By SIDNEY J. RAUH, D.D.S., Cincinnati, O.

Read before the Massachusetts Dental Society and reprinted from The Journal of the Allied Dental Societies.

This paper is so practical and comes from such good authority that I am reprinting it in full. Those of you who wish advice concerning the technic of school examinations will find it here, while the report on the experimental and control classes in a Cincinnati school is of great interest.

Dentistry is at last beginning to realize in action as well as name that it is a profession, and no one factor conduces more to this condition than the broad principle of prevention, which must be the fundamental basis of the mouth hygiene movement.

In primitive times each individual was a force unto himself. He lived through his ability to collect the necessities for life, and through this very effort became physically strong. Today we live in communities, many of them very large, creating a series of problems which we are attempting to solve. In the primitive state the "survival of the fittest" applied to the physical; in this age, mental capacity gives us our position in society. The so-called diseases of civilization have rapidly developed; only within recent years has there been any effort made to control, much less to cure them. Tuberculosis, the social diseases and caries are probably the most prominent of this type of disease; there are well-organized movements for the control of each.

Naturally the dentist must

lead in the mouth hygiene movement, for in the end it requires the specialist to solve this special problem. How can this be done? There are three main branches to our movement — education, dental inspection and free clinics—each dovetailing, no one complete without the others.

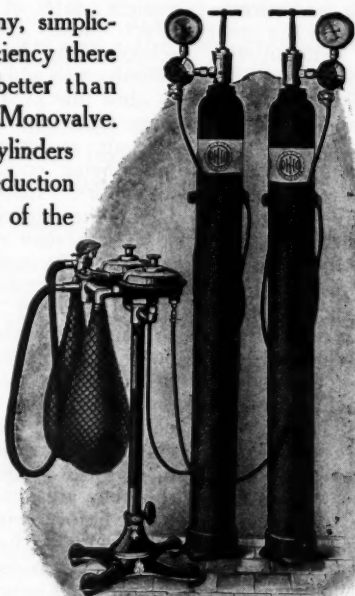
With the Cincinnati work as a basis, an attempt will be made to evolve plans that can be worked in different communities. The size of the problem will have to determine how these plans should be modified to suit the local situation. In some parts of the country absolutely nothing has been done; in others there are well defined movements. For this reason it would be of interest to suggest a plan for starting the work, where nothing has been attempted.

First and foremost — organize from this central means dental organization, no matter how large or small the population may be there must be a complete understanding among the members of the profession if anything is to be accomplished. Practically

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every large center has a dental society, which is a working force for the solution of all dental problems. If this be not the case the logical step is to make it such. Organize from this central body a strong oral hygiene committee, with a chairman who is imbued with the spirit of his work. Without this there can be no success.

Next, the authorities of the school system and health department should be approached and permission obtained to hold the first dental inspection, which brings us to the point of the method. Suitable blanks are filled out, according to the accompanying diagrams. The name of the child, age, room number, address, etc., are filled in before the child enters the room—which card the child presents to the examiner.

One of the original parts of the Cincinnati work was the development of a strong volunteer force of women to do our recording, tabulating, sterilizing, and all other clerical work which is very large when a number of schools are to be examined. To organize this corps requires a bit of executive ability; their interest goes far beyond the actual work involved in making prominent the movement among the citizens of the community. Do not attempt to diagnose, perform any operation, or do anything more than merely enumerate the defects that are seen in the mouths, for if you do there will be conflict in the profession, for no two opin-

ions can be relied upon to be the same as to either diagnosis or treatment.

DENTAL INSPECTION.

The same general scheme may be employed for a single inspection as for regular work, selecting the most convenient date of the week, which means consulting the school. The dentist and the volunteer should then adhere to this time. Any ordinary large table can be used with a chair at either end; one table being enough for two inspectors. Inspector stands facing the window, or, if he so desires, may sit facing the patient. The assistant is stationed at the table with back to the examiner. In addition to this, there should be one other assistant to sterilize the instruments. For this purpose, solutions of carbolic acid, about 1 per cent., are employed, in which all instruments are immersed. From this they are immersed in hot water before being put in the mouth just prior to the examination. A solution of bichloride of mercury, 1 to 1,000, in a bowl is at hand, and the operator immerses his hands in this, prior to the examination of each child, sufficient towels, of course, being employed for him to keep his hands dry. Wash the hands in running water as frequently as practicable.

Starting from one side of the mouth, say, superior left, the examination is made, ending at the upper right, then below inferior right to left, calling out each defect of the permanent teeth to the

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Safety and Service—the two greatest words in the gas world. The absolute safety to patient and practitioner is the first consideration when selecting gas. The careful, conservative and consistent Doctor will not impair his reputation and success by taking chances.

It isn't necessary to take chances

"Lennox" Nitrous Oxid and Oxygen is guaranteed the highest possible uniform purity. It is absolutely safe and dependable—causes no unpleasant symptoms to patient. In fact, the Doctor's success in analgesia and anesthesia depends upon

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We make no apparatus for administering gas, devoting our entire time to the manufacture of the purest gas on the market, and will be glad to furnish literature and information as to how to obtain the gas at the lowest possible cost. If interested, write your name and address and name of your dealer at the bottom of this page, detach and mail to

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assistant, who marks them on the blank. In the meantime the assistant can start to ask the questions of the child, which are enumerated on the blank. It will require, however, a combined questioning, as well as examination, to finally decide the answers to most of these questions.

The question, *Does Child Brush Teeth?* must be answered by the examiner, as the child's answer is not sufficient, he usually answering "Yes," when the operator can plainly see that the brush is not used.

Family Dentist?—is for the purpose of assisting the social investigation so as to preclude the possibility of imposition on the part of the patient, and is only an assistant to the final decision as to whether the child shall receive free treatment in the clinic or not.

Condition of Mouth? — means the general condition of teeth, both temporary and permanent, gums, and any other defect which may be present in any part of the mouth.

Condition of Gums — is self-evident.

Teeth Filled?—will help answer the question of *Family Dentist*, for if answered in the affirmative it will be an easy matter to find out who did the work.

Mal-occlusion? — should refer only to general irregularities which affect either mastication or general health of the patient.

Under "*Remarks*" = any

extraordinary condition should be reported.

Disposal of Case—is to be filled in later to show if case has been treated, if so whether by free clinic or private practitioner.

Condition of Temporary Teeth—under this heading the general condition of temporary teeth is noted, as it has been found to be impracticable to specifically note each defect. The dentist who finally treats the case must decide what must be done with this very perplexing problem.

When the inspection is completed, the forms are turned over to the volunteers, from these the notification blank is filled out, which is sent to the parent of the child. The results are also tabulated upon one of the large school blanks which will be shown.

At every inspection, a short talk should be delivered to the teachers of the school, explaining the scope of the work and instructing them how to brush the teeth and how to inform the pupils to do the same. If the children can be reached, a talk should also be made to them, for in this way general interest is aroused, and it is surprising what direct results can be obtained just through an inspection, even though a free clinic be not in existence, especially in smaller communities.

If the work is to be done on the best basis, a follow-up system should be in force, so that those children who have not been attended to within a

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COLUMBIA ENGINE (Model "C")

duce appearance and provide efficiency, factors of great opportunities this season to see these exhibits, and have this. Our catalog details our product and we will be

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reasonable length of time shall be induced to receive treatment.

UNDER NO CIRCUMSTANCES should any operation, no matter how trivial, be attempted, such as extraction of loose temporary teeth, for the sight of blood is sometimes sufficient to disrupt an entire school, and the province of the inspection in the end is to draw attention to defects, not to cure them.

Upon the blank, no diagnosis should be made unless it be an extraordinary condition, such as active syphilis of the mouth or some similar condition, for the practitioner must have the privilege of deciding what shall be done.

Strive for accuracy, not speed, in inspections. In those communities where there are professional workers, such as school nurses, district physicians, dentists and dental nurses, the work will be made much easier, but there must be a thorough co-operation between these forces. Remember that co-operation is the crying need of the day, for which reason employ all existing forces, such as tuberculosis associations, charity organizations, welfare organizations, etc., to assist in your work as well as assisting them in theirs.

Some of the dentists will state that their time is too valuable to be spent in this work, in which case they should give the cash equivalent, or employ some one to do their part of the work.

FREE CLINICS.

In order to organize a free clinic, the sympathetic attitude of the public must first be obtained. This can be done in various ways. Appear before all organizations of any kind existing in the community and explain to them the necessity for the work, using as a basis the results of the inspections which have been made. The active co-operation of the board of education and the board of health must be had, for in the end whether the free clinic be under municipal control or private initiative it cannot do effective work without these. If possible the clinic should be located in a public school building; in large communities it is better to have them widely distributed. This assertion is made with great diffidence in Boston, in view of the fact that the Forsyth Clinic is about to be opened, but when you take into consideration the fact that the children who attend these clinics come from the poorest families, the item of car fare, time, etc., is most important. Furthermore, the moral effect of having the clinic under their observation at all times is educational.

It is probably true that the large clinic can be run somewhat cheaper proportionately than the small one, but the results obtained, we believe, are worth the slight additional expense. It will be most interesting to note how the Forsyth institution will work out, for this may disprove this latter theory.

"THAT'S WHAT THEY ALL SAY"



DR. ROY C. ROWLEY
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Jan., 26th, 1914.

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Three operators at \$50 per month (10 months)	1,500.00
One operator at \$60 per month (10 months)	600.00
Chief assistant (full time)	600.00
Second assistant (full time)	450.00
Third assistant (full time)	350.00
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	\$5,000.00
Equipment	800.00
Supplies	500.00
Office, etc.	100.00
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Total \$6,400.00

Approximate number of patients treated, 2,500.

It has been found that those young practitioners who desire the clinic positions at a salary, prefer working half, to the entire day, for in this way they can build up their practice while earning the additional salary, as well as acquiring an experience which comes to few young men who start directly into practice after graduation from college. We would advise any young practitioner who believes in high standards of dentistry to secure such a position, for it will teach him how to work, how to handle large numbers of patients, and many an interesting case will be seen that may take years of private activity to present.

LECTURES.

Different schemes have been brought forth in various centers for the development of the oral hygiene idea. Some believe in the free clinic scheme; that if you handle the poor children, those of the better class will rapidly follow—this being all that is necessary to develop the child's mind along those lines. In the free clinic he will be instructed how to brush his teeth, take care of his mouth, etc. Another group believes in the educational scheme in which the lecture and pamphlet form an important part, it claiming that if you educate the child sufficiently, he will in some way receive the proper treatment. The third class advocates dental inspection, saying this will educate, the child eventually receiving treatment the same way as from the lecture.

However, from our experience, we think it is only a combination of all the forces which can bring the general solution; even then one must be content to be patient and await results.

In the lectures, the stereopticon should be employed if possible, also large models, large tooth brushes and possibly most important of all, use the toothbrush in your own mouth to show the proper method of brushing; for it has been shown through the entire kindergarten system, that it is the visual demonstration that impresses the child. This will also apply to the adult.

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In order to demonstrate the effects of dental inspection with a follow-up system, we quote the following results: These two schools were examined in January 1913 with these results in less than four months and both schools were in so-called poor districts:

First Intermediate—Number examined, 664; applying to private practitioner for treatment, 265; to free clinic, 120; those having no defect, 74; withdrawn from school, 35; leaving, 170, who require further treatment; in other words, 75 per cent. of the school were reached in this short time.

Highland School—Number examined, 326; private practitioner, 116; free clinic, 88; no defect, 22; no treatment, 114; percentage reached nearly 70 per cent. The children are still applying for service.

Herewith are shown results of general dental inspection—Tables I, II, III and IV.

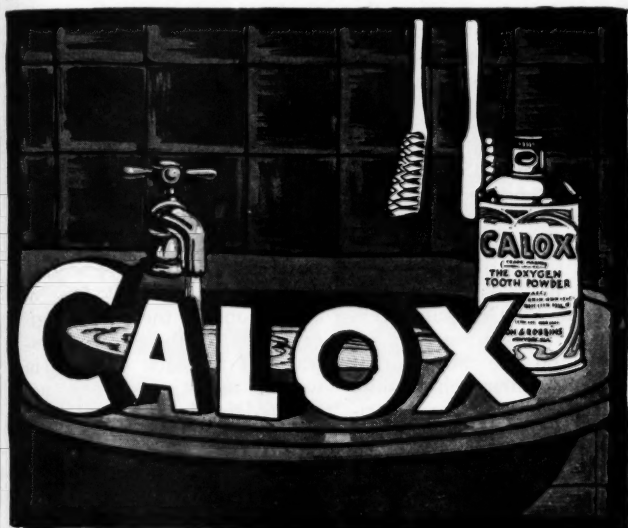
EXPERIMENTAL CLASS.

Several years since in Cleveland, an experimental class was instituted for the purpose of demonstrating the efficacy and necessity for mouth hygiene. Remarkable results were shown with which you are all probably more or less familiar. Unfortunately, however, no "control class" was formed with which to compare the results, and in addition only very defective mouths were chosen. We, believing that these experiments should be made in an ordinary class room upon all classes of children, selected two classes

in a school situated in one of the poorer districts of Cincinnati. They were the same grade, the age, environment and general conditions of the children being the same. A series of psychological, physical, scholarship, attendance, behavior, appearance, manner, social and other tests were made and tabulated at the beginning of the school year. After this the mouths of the children of the "experimental class" were all placed in hygienic condition, those of "the control" being merely examined. The children of the "experimental class" were given regular toothbrush drills, periodical test dinners at which they were taught to chew, and a general supervision of the mouths was regularly maintained. At the end of the year all the tests were repeated and a comparison made between the two classes. Mr. Hauer, the principal of this school reports the following as to results in his summary:

FIRST—ATTENDANCE—The average monthly absence of the experimental class is a little less than that of the control. There could not possibly be much difference, because we watch the attendance of all the children very closely. We have either a truant officer or probation officer at school four days out of five, and the absent list is sent to the office every day. So you can readily see there is "not much chance."

SECOND — SCHOLARSHIP—In the latter part of January, an examination was held, and



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Added to water produces lime water and hydrogen dioxide, the best solvents and destroyers of the gelatinous plaques of decay. Prove it yourself by actual test.

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both classes were given the same questions. The teachers were conferred with as to how each question should be marked, and where there were several parts to a question as to the value of each part, so that all the pupils would be marked alike. I afterward looked over the papers to see how the pupils did, and found that they were marked in accordance with instructions. The class average, in arithmetic, geography and spelling, the subjects that would test their scholarship, was 16.5 higher in the experimental class than in the control. In other words, the class average in these subjects was 85.4 per cent. in one class and 68.9 per cent. in the other. A very pronounced difference, you will observe. The lower average of the two is, I thought, about normal, because the questions were not easy. The difference may not be wholly due to the dental attention given to the children, for one thing entered into the experiment that we at school could not control, though we tried to—this was that the experimental class found out at the end of two months that it was such. I mention this fact in order to treat this topic fairly and impartially.

THIRD — PHYSICAL IMPROVEMENT. — The general appearance of the pupils, for a downtown school, has been above par. In some instances the improvement in this direction cannot be appreciated unless you knew the pupils then and now. It is, indeed,

a pleasure to note the pride they have in their personal appearance, and the splendid manner, spirit, and general attitude they manifest in their class work.

Miss Conkey, who had charge of the psychological tests, says in her conclusions:

"In a general summary we find that there is a decided lead taken by the experimental class. This holds true in all but one of the psychological tests. In the purely physical test the lack of gain in weight might justly be accounted for by the strain and nervous tension incident to the dental treatment which in some cases continued over a long period. It is quite possible, also, that the gains in the various tests would have been greater had it not been for this conflicting element.

"While the control class led six times when the tests were first given, it leads but once in the final series. On the other hand, the experimental class maintains her own four leads and passes five of the six leads of the control class.

"To make the above comparison more valid, we hope to follow these classes for another year, submitting each to a second series of tests at the beginning and close of the school session. The element of dental interference in the experimental class will be slight since the original timidity has been overcome, and but little treatment will be needed to keep the mouths in their present good condition."

Realizing that one year's



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It is perfectly obvious that the greater the density of the material the more durable the filling. Also as **TRANSLUCIN is a plastic porcelain**, the more powder and the less liquid used in the mix the greater the translucency.

This also accounts for its marvelous edge strength, which is superior to any other silicate, as well as its extreme adhesiveness.

Directions for using **TRANSLUCIN** are extremely simple. There is no mystery about it. Simply stir the liquid, keep your slab and your spatula clean, mix it until it curls under the spatula or until it acquires a crumbly consistency and pack into the cavity.

It sets slower on the slab than in the mouth, affording ample time for thorough condensation and perfect technique.

LEE S. SMITH & SON CO., Pittsburgh, Pa.

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work was not sufficient, we have adopted the same procedure this year, and in due course of time we hope to publish these results. Unfortunately at this time our data are not in scientific shape to present to the public. The results, however, are plainly seen, and the children enter into the work with an enthusiasm that is scarcely believable. It has been necessary this year to cleanse the mouths of but three children out of a total of fifty a second time, and we can assure you that these three would be quite up to the average of the ordinary child applying for service in our offices.

EXHIBITS.

At various times it becomes necessary in the educational work to show to both the profession and the laity what is being done, and for this purpose we have an exhibit, part of which is shown at this meeting. It consists of statistics pertaining to the work, various mottoes, models, photographs and usually one of the dental supply houses supplies a model dental office, which always attracts great attention. We would particularly call attention to the models, for they serve the purpose of attracting the public, and it is always necessary to have some one conversant with the work in charge to explain.

OTHER INSTITUTIONS.

Almost all the work in the oral hygiene branch has been directed to school children. In all communities there are various institutions, such as

orphan asylums, children's homes, homes for delinquent boys and girls, etc., all of which should have competent dental attention. It becomes necessary in these cases to do propaganda work to interest those in charge to regularly employ one or more dentists. This has been done at the House of Refuge, Cincinnati, where for almost two years, one operator, working half a day, six days per week, is constantly employed. The children in this institution regularly employ the toothbrush, and the results are most gratifying. The city pays this man, who is under the charities and corrections department. In our new city hospital, which will be dedicated in a few months, a magnificent dental room will be part of the equipment. All these things have been made possible by a well-organized committee of the Cincinnati Dental Society.

HOW TO INTEREST THE MUNICIPALITY.

It is most frequently asked, How do you do these things? BY PERSISTENT, HARD, NEVER-ENDING EFFORT. We make it our business to meet the various heads of all branches of the municipality that have to do with any and all institutions that may be benefited by our work. This starts with the mayor of the city, includes the board of education, board of health and their employees.

We believe Mr. Dyer, the superintendent of schools of Boston, can verify this statement, and I would request that in his discussion that he

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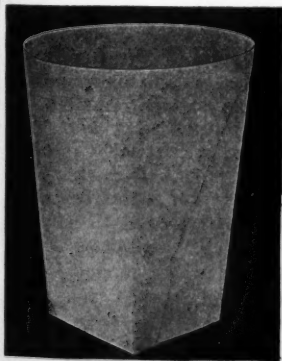
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GLYCO - THYMOLINE is as necessary on your bracket table as cotton and pliers. Ask us to send you free samples for yourself and patients (bottle like cut) FREE of cost.

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¶ And if this valuable loss of time to each of you was caused by the wax model becoming distorted or broken in handling you could have avoided it by using

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which are so hard when chilled that you need have no fear of deforming them and yet they are so tough they can be carved perfectly.

"The Best Wax in the Best Form"

¶ 60c box (over 200 impressions) at all dealers or we will send you a few CONES to test out.

A. E. PECK MFG. CO., Minneapolis, Minn., U. S. A.

bring out how this was done in his department when he was superintendent of schools of Cincinnati. At the start of our work, we had trials and tribulations with various principals and school teachers. Finally most, if not all of them, at least if not enthusiastic about our work, tolerated the same.

HOW TO INTEREST THE DENTISTS.

Unfortunately this problem is as difficult as any of our others. Not until our profession has realized that it is only through its general service to the public that it will be properly recognized and appreciated, will this movement take its proper position beside the great progressive problems of

the day. Each and every man must do his part, and there is a place for every man. How can we obtain the time? No one has time, he makes it. We have frequently noted that it is the busy men, who have their affairs properly in order, that respond. At least 75 per cent. of the members of the Cincinnati Dental Society today are contributing either their service or money to our movement, and if one does not do so, we never stop until he is interested. We only elect those men that show themselves capable and willing, to office in the oral hygiene committee, and, if the interest of any one grows less, we appoint a new man to take his place



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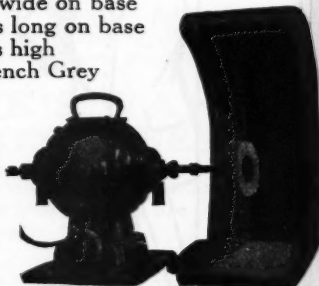
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SOCIAL INVESTIGATIONS.

There seems to be a general fear that numbers of unworthy cases will present themselves at free clinics, and there is some ground for this theory. Therefore, it becomes necessary to employ some one, preferably a woman, who knows something about social work. No case must be allowed in the clinic without proper recommendation, and, if any doubt exists, it must be investigated. The school nurse is usually in a position to make this investigation, and, if not, the various charitable organizations must be called upon. In some cases we make our own investigations, but we believe that the true American spirit will prevail, and that our citizens will

not allow free treatment, if they can afford to pay for same.

The teacher asked: "When did Moses live?"

After the silence had become painful she ordered: "Open your Old Testaments. What does it say there?"

A boy answered: "Moses, 4,000."

"Now," said the teacher, "why didn't you know when Moses lived?"

"Well," replied the boy, "I thought it was his telephone number."

From the Kalamazoo Press we learn that a young lady of Portiac was "hurt on her birthday." This is more painful than being tanned on one's vacation, but not so bad as being sunburned on one's week-end.—*Journal of the Southern States.*